CHAPTER 9

CONCLUSIONS

This report provides a detailed explanation of the construction of a data base for Social Security beneficiaries in the 1931-60 birth cohorts in the year 2020. For these cohorts of current and future retirees, we have projected income at retirement age and post-retirement incomes to the year 2020. Incomes in retirement from Social Security benefits, pensions, non-pension financial assets, and partial retirement earnings were calculated based on separate projections of lifetime earnings patterns (Chapter 2), pension coverage and benefit amounts (Chapter 3), other (non-pension) financial assets and housing wealth (Chapter 4), the timing of retirement (Chapter 5), and partial retirement earnings (Chapter 6). To project the population of future beneficiaries, we used projections by RAND of mortality, marriages, and divorces, and made a separate projection (in Chapter 2) of the incidence of disability. Based on projections of incomes from different sources at retirement, we then project changes in wealth and income after retirement through the year 2020 (Chapter 7).

The projections are based mostly on regression equations that explain changes in each source of income over a person's lifetime as a function of other (previously projected) income sources and demographic variables. Thus, to a large extent the projections assume that past behaviors will be repeated for later birth cohorts. The projections do not anticipate any major structural changes, such as a change in the attitutes towards retirement of more recent cohorts. Differences in retirement income between future cohorts of retirees and today's cohorts of retirees result from different early life histories (such as the level of earnings early in one's career) and differences in the demographic profile of future retirees. These latter differences include changes from earlier to later birth cohorts in education levels, the racial composition of the population, mortality rates at different ages, and marriage and divorce rates.

While characteristics of future retirees, such as their date of retirement, sources of post-retirement income, income differences by education and marital status, and overall dispersion of incomes will not differ radically from characteristics of today's retirees, some notable trends emerge from the projections:

- Lifetime earnings inequality is projected to be greater for more recent than for earlier cohorts of retirees. This reflects in part the increased inequality of earnings among younger workers today compared with earnings inequality experienced by earlier cohorts when young.

- Lifetime earnings of women will rise relative to lifetime earnings of men for younger cohorts. Again, this reflects the higher labor force participation rates and increased educational attainment of more recent, as compared with earlier, cohorts of women.

- Relative to the average wage in the economy, lifetime earnings for the early baby boomers (1946-50) will be higher than lifetime earnings for earlier (1931-45) or later cohorts (1951-60). This earnings forecast affects our projections of Social Security benefits, income from post-retirement earnings, and other sources of income for Social Security beneficiaries.

- Future workers are more likely to be covered by a defined contribution (DC) pension and less likely to be covered by a defined benefit (DB) pension than today's workers. This shift reflects an assumed increase in the proportion of newly covered workers who will have DC instead of DB coverage.

- Future cohorts of women retirees will have more pension coverage in the future than today's women beneficiaries. This occurs as a result of the increase in lifetime earnings of women. In contrast to men, the DB coverage of women is not projected to decline.

- DB benefits per beneficiary at retirement (relative to the average wage) are projected to decline for the youngest cohorts of workers. The decline in DB benefits results from the projected decline in earnings of younger cohorts of workers. Average DC balances at retirement (relative to the average wage), in contrast, are projected to increase.

- Birth cohorts after 1946-50 are projected to have lower homeownership rates and less average housing wealth at retirement (relative to the average wage) than the 1946-50 birth cohorts. This in part reflects an increase in the proportion of single people in the population.

- Wealth in other (non-pension) financial assets at retirement, relative to the average wage, is projected to be lower for each successive cohort after the 1931-35 birth cohort. This decline in non-pension wealth reflects both a fall in lifetime earnings for the last two cohorts and lower holdings of non-pension wealth of younger workers in the most recent birth cohorts than our wealth accumulation equation predicts based on wealth holdings of earlier cohorts at the same ages . Some of this decline in non-pension wealth, however, reflects the substitution of pension wealth for non-pension assets that has occurred in recent years, especially the growth in defined contribution plans.

- The determinants of when to accept Social Security benefits differ greatly between married men and married women and between couples and single individuals. Women on average choose to receive benefits earlier than men, but are also more likely to wait until age 67 before receiving benefits. Married women on average claim benefits about a year earlier than their non-married counterparts. Married men also claim benefits earlier than never-married men, but not to the same relative degrees as married compared with unmarried women.

- In spite of differences in factors predicting the timing of retirement among groups and by income, and changes in both the composition of groups and relative income levels, we project little change across cohorts in the timing of Social Security benefit receipt. This probably is the result of offsetting effects. For example, lifetime income gains of women make it more likely that they will retire early by making retirement more affordable, but increased education of women and higher earnings just before retirement age make their early retirement less likely by raising the potential rewards for continuing to work.

- More future Social Security beneficiaries will have some post-retirement earnings at ages 62 and 67 than current beneficiaries. This increase in labor force participation among Social Security beneficiaries will be greatest for married females.

- Labor force participation among 62 year old beneficiaries is projected to increase through the 1951-55 cohort, but will decline in the last cohort. The percentages working between the earliest and latest cohorts will increase for all 4 gender-marital status combinations, but participation of married males, unmarried males, and unmarried females will decline slightly after the 1951-55 birth cohort.

- For 67 year olds, participation will rise over time for all groups except married males. Overall participation stabilizes in the 1956-60 cohorts. Econometric results suggest that average earnings of those working and receiving benefits will increase as the Social Security earnings limit for 65-69 year old workers increases.

- Overall incomes at retirement mirror changes in the separate income sources. Income at year of first benefit receipt peaks for the 1946-50 cohort and then declines for later cohorts. The biggest sources of decline for cohorts born after 1946-50 are in earned income and DB pension income, reflecting the projected lower lifetime earnings for the most recent birth cohorts in MINT. Social Security and income from financial assets (including DC plans) will be a larger share of income for later than for earlier birth cohorts.

- Per-capita income of Social Security recipients at initial benefit receipt will be less evenly distributed for later cohorts of retirees. The top quintile of beneficiaries will receive 6.45 times as much income at retirement as the bottom quintile in the 1931-35 birth cohorts. In contrast, for the 1956-60 birth cohorts, the top quintile will receive 8.19 times as much income as the bottom quintile. Compared with the 1946-50 cohorts, the per capita income (relative to the average wage) of the 1956-60 cohorts will be lower for every income group except the top quintile. In the top quintile, average per capita income at retirement in 1956-60 will be higher for females, but lower for males compared with per capita income in the top quintile of the 1946-50 birth cohorts.

- Econometric analysis suggests that retirees generally reduce their holdings of financial assets as they age, but at a much slower rate than the decline in the value of an annuity with an expected value of zero at the date of death. Some groups increase their financial asset holdings in retirement. The decay rate of financial wealth varies with homeownership status, race, education level, and marital status.

- Poverty rates of the most recent birth cohorts of retirees (younger retirees) are projected to be higher than poverty rates of earlier cohorts (older retirees) in 2020, even though the older retirees will have a lower average income. This reflects the increased dispersion of the income distribution. The increase in poverty among younger compared with older retirees is concentrated among certain sub-groups of the population, including retirees with less education, blacks, and retirees who never married.

- The total poverty rate among retirees is projected to be higher in 2020 than in the early 1990s, in spite of the substantial increase in average earnings of the population that is projected to occur over the next 20 years. Changes in poverty rates reflect both changes in the composition of different groups in the population and changes in poverty rates within groups. Younger retirees will become a larger share of the population in 2020 than in the early 1990s and will have higher poverty rates. The poverty rate will increase substantially among never married retirees, who will also become a larger share of the population. The rise in the percentage of retirees who are divorced also contributes to the higher poverty rate, in spite of a projected decline in poverty among those divorced, because divorced retirees have a higher poverty rate than others.

- The projections of higher poverty rates for later birth cohorts and for the entire retired population in 2020 mainly reflects projected lower lifetime earnings for later cohorts and reduced Social Security benefits resulting from the scheduled increase in the normal retirement age. The earnings projections are based on

observed earnings through 1996. We have not performed a sensitivity analysis on how projected poverty rates may change with altered assumptions and methodologies. If, however, earnings rise at the bottom end of the income distribution or if low-income workers stay in the labor force longer in response to reduced social security benefits, these increased poverty rates may not materialize. Nonetheless, the possibility that future retirees might experience higher poverty rates in spite of rising economy-wide earnings raises important policy concerns and merits further examination.

- Examination of the lifetime earnings patterns of the 1931-40 birth cohorts reveals a large diversity in patterns of earnings among workers. This diversity suggests that representation of individuals with level career earnings patterns as "typical" may be misleading for some analytical purposes.

- The methods for projecting earnings, while providing accurate forecasts of average age-earnings profiles, suppress some of the variation in earnings patterns among workers. This increases over time the share of workers who are shown to have "typical" earnings patterns.

- Use of the representative earnings profiles, both historical and projected, from the MINT project in place of the traditional SSA profiles of high/medium/low earners makes a difference in policy analysis. Using the MINT profiles instead of the traditional SSA profiles makes the present value of Social Security benefits relatively higher than the present value of benefits from a system of individual accounts. The higher relative return in the current system using the MINT profiles occurs both because MINT earnings are on average lower than earnings in the traditional profiles and because MINT earnings occur later in life, thus reducing some of the advantage of compounding under individual accounts.

Compiling the MINT data base was a complex process. Because of the sequential nature of the projections, projections of each set of variables is highly dependent on the results form projections in early stages of the project. In particular, the projection of lifetime earnings in chapter 2 substantially influences all of the subsequent projections. Any misspecification or error in one stage of the project could produce bigger errors in downstream projections. Thus, at this stage, the findings should be viewed with some caution.

The MINT project, as designed by the Social Security Administration and implemented by the Contractors, took certain shortcuts in order to make it possible to develop a workable model within time and budget constraints. Some of these shortcuts have been questioned by reviewers. In particular, we concur with the suggestion that further work on the modeling of retirement behavior, especially for workers between ages 55 and 62, would be a useful next stage of model development. This would require a substantial revision of the current earnings model, which may

or may not change the main qualititative findings of in this report. But more explicit modeling of the retirement decision would result in projections that better capture the diversity of career earnings patterns and would increase confidence in the model's findings.

It would also be useful to explore the effects of alternative assumptions and parameters on the projected distribution of retirement income. These include assumptions about the mean and variance of rates of return on financial assets, trends in pension fund participation by plan type, and interactions between pension and non-pension saving. It would also be useful to incorporate in MINT an explicit response of post age-62 earnings (both the decision to accept benefits and partial retirement earnings of beneficiaries) to increases in the normal retirement age.[1] One advantage of MINT in its current form is that it is possible at a relatively modest cost to perform a wide variety of sensitivity analyses of this type.

CHAPTER 9: REFERENCES

Melissa M. Favreault, Caroline Ratcliffe, and Eric Toder. 1999. "Labor Force Participation of Older Workers: Prospective Changes and Potential Policy Responses." *National Tax Journal* LIII (3): 483-503.

CHAPTER 9: ENDNOTES

1. For an example of such an estimate, see Favreault, Ratcliffe, and Toder (1999).